



PUBLIC SECTOR RESEARCH ESTABLISHMENTS

Government response to the
Multi-Departmental Scrutiny of
Public Sector Research Establishments

Presented to Parliament by the
President of the Board of Trade
by Command of Her Majesty

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INTRODUCTION

The White Paper on science, engineering and technology¹, published in May 1993, set out a range of measures designed to secure maximum advantage from our annual public expenditure of some £6 billion on science and technology.

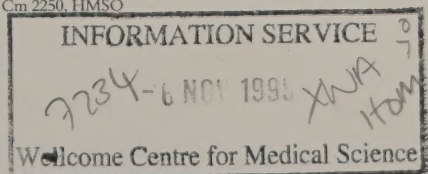
These included a commitment to extend and accelerate the operation of market forces in relation to the science and technology which Government Departments commission in support of their policy, statutory, regulatory and procurement responsibilities. This will enable Departmental and Research Council customers to obtain an efficient and effective service from a broad supply base embracing both public and private sector suppliers.

In addition, the Government stated its belief that many of the scientific services provided by its research establishments could be carried out in the private sector. A number of separate reviews by Departments of the future of individual establishments have been undertaken:

- the Department of Trade and Industry has announced its intention to privatise the work of AEA Technology, the National Engineering Laboratory and the Laboratory of the Government Chemist, and to contracturise the operation of the National Physical Laboratory;
- the Department of Transport has announced its plans to privatise the Transport Research Laboratory;
- the Ministry of Agriculture, Fisheries and Food and the Welsh Office have announced their decision to move a range of ADAS activities towards privatisation;
- the Overseas Development Administration is considering the transfer of the Natural Resources Institute to one or a group of universities.

In addition, the Office of Science and Technology announced the establishment of the Daresbury and Rutherford Appleton Laboratories as a non-departmental public body, to be known as the Council for the Central Laboratory of the Research Councils.

¹ *Realising Our Potential: A Strategy for Science, Engineering and Technology* Cm 2250, HMSO



The White Paper also stated that, where establishments were to remain, for the time being, in the public sector, the Government would ensure that customers were provided with a high-quality service in a way that represents best value for money. Careful consideration needed to be given to holding the level of any such capacity to the minimum necessary to meet the Government's statutory responsibilities and other essential requirements. The Government therefore announced its intention to undertake a scrutiny of public sector research establishments.

The terms of reference of the scrutiny were, on a sector by sector basis:

- to identify those public sector research establishments where early privatisation is feasible and desirable;
- where privatisation is not feasible or desirable, to identify the potential for rationalisation of facilities or capabilities, and recommend means of implementing such rationalisation;
- to consider whether changes to current ownership and financing arrangements for establishments would lead to more effective operation of the open market and better value for money; if so to recommend one or more alternative models.

The scrutiny was undertaken by a team drawn from a number of Government Departments and the private sector, under the auspices of the Government's Efficiency Unit. The scrutiny focused upon around 50 civil public sector research establishments in England, Scotland and Wales, which varied in size from 48 staff to 8000, and in function from basic research to technological development and measurement services.

The report of the scrutiny team, which was published on 11 July 1994, contained a range of proposals aimed at ensuring that administrative overheads in the research establishments were minimised, and that resources were devoted to maintaining the excellence of UK science, engineering and technology.

The publication of the report was followed by a four month period of consultation, during which over 150 contributions were received from individuals and organisations from business, academia and the wider science and technology communities. In addition, the Science and Technology Committees of both Houses of Parliament produced helpful

reports. The Government is grateful for the many useful and constructive contributions that have been made.

The Government accepts the majority of the report's recommendations. In particular, the Government accepts the proposed measures to extend competition for Government-funded science, engineering and technology, and to improve coordination between customer Departments and Research Councils, and between the research establishments, industry and the universities.

Where the scrutiny highlighted specific opportunities for rationalisation of research facilities, or for closer working between particular establishments, the Departments and Research Councils concerned will examine these on a case by case basis and announcements will be made separately.

The scrutiny report proposed that establishments in the life sciences area be rationalised by grouping the establishments on the basis of market sector or geography, or by appointing Directors of Rationalisation to identify opportunities for rationalisation of capabilities or facilities.

The Government accepts that grouping establishments into larger organisational structures can deliver benefits in more flexible use of resources and relative ease of strategic direction. This has proved to be successful in the rationalisation of establishments under the Defence Evaluation and Research Agency.

The consultation on the scrutiny report revealed concern about the specific proposals to group establishments, in terms of the disruption that would be caused and the complex lines of accountability which could result. The Government has considered these views carefully, and has decided not to proceed with these particular proposals, nor to seek rationalisation through the mechanism of appointing new Directors of Rationalisation.

Nevertheless, the Government accepts the scrutiny's finding that there should be more coordination and cooperation in managing research establishments across Departments and the Research Councils. This is consistent with the policies set out in the 1993 White Paper.

The Government is therefore introducing the following new measures which build on the existing prior options process (see box):

- the process will be adapted and extended to include all public sector research establishments, including Research Council establishments;
- each review will address the actual and potential relationship of the establishment in question to any others in similar or related fields, with an eye to potential rationalisation and privatisation. Owners or sponsors of other establishments, OST and the Office of Public Service will be involved in this aspect of each review;
- reviews of research establishments will be rigorous in their examination of the options for privatisation. Clear criteria will be agreed for assessing whether establishments are suitable for privatisation, taking account of the recommendations of the scrutiny report. Each review team should contain at least one independent member;
- each review will take explicit account of the implications of the Technology Foresight findings for the future role of establishments and of the requirements of customer Departments;
- the findings of all reviews will be considered by Ministers collectively to ensure that no cross-departmental aspects have been missed;
- the Government aims to announce a timetable for prior options reviews of research establishments shortly, with a view to the major part of the work being completed by the end of 1996.

THE PRIOR OPTIONS PROCESS

It is Government policy to provide only those functions which are both necessary and best carried out in the public sector. Prior options reviews involve a rigorous test of whether the function is required at all, and whether there is scope for privatising, contracting out (which could include market testing), merging bodies or transferring work between them.

Research establishments which are executive agencies or non-departmental public bodies are already subject to prior options reviews carried out by their sponsoring Departments.

On the supplier-side, the scrutiny report proposed a range of mechanisms for closer working between research establishments. These include the formation of clubs or consortia amongst research establishments, the use of sub-contracting and joint ventures with private sector suppliers, and the use of joint resource management boards for particular groups of research establishments.

The scrutiny pointed out that a number of good examples of such arrangements already exist. The Government accepts that there is scope for strengthening cooperation between research establishments along these lines. Departments and Research Councils will be asked to report on the current position in the next Forward Look in May 1996, which sets out future challenges and opportunities for publicly-funded science, engineering and technology.

In the rapidly changing world of science and technology, the Government must have access to the best scientific and technological expertise and advice and must secure the availability of a supply of high quality scientists and a strong underpinning of basic and strategic science to industrial users. The measures proposed here build upon the strengths of the public sector research establishments, to ensure that they are able to respond to the changing needs of their customers, and to maintain the reputation for excellence for which they are renowned.

RESPONSES TO THE REPORT'S RECOMMENDATIONS

1. **The Agricultural Development Advisory Service (ADAS) should be privatised, drawing on the experience of other public sector research establishment privatisations.**

The Minister for Agriculture, Fisheries and Food and the Secretary of State for Wales announced on 28 June 1995 their decision to move a range of ADAS activities towards privatisation.

2. **DOE should review the case for moving elements of the Building Research Establishment (BRE) into the private sector, taking account of planning now under way for the Transport Research Laboratory (TRL) and the National Engineering Laboratory (NEL), which conduct similar types of activity.**

A prior options review of BRE is now approaching its final stage of discussions between DOE, HM Treasury, OST and OPS, to be followed by collective consideration by Ministers. The results will be announced as soon as possible.

3. **Departments and Research Councils should routinely examine the potential for transferring public sector research establishments to universities.**

Departments already review functions that have been proposed as candidates for agency status and carry out regular prior options reviews of agencies and of non-departmental public bodies. These reviews will now be extended in an adapted form to all public sector research establishments. Transfers to universities, along with other forms of privatisation, will be considered in this context. The potential for transfer will be evaluated taking into account the opportunities for wider competition, better value for money and increased scientific quality.

- 4. Public sector research establishments should, within two years, develop effective formal links with universities where these do not already exist.**

The Government accepts that links between public sector research establishments and universities can improve scientific provision. Many links already exist. For example, the Scottish Office Agriculture and Fisheries Department's December 1993 policy paper "Policy for Science and Technology" recognised the benefits of existing links between research establishments and Scottish higher education institutions. Other examples include strategic partnerships with universities in respect of many MRC Units; public sector research establishment staff serving on university committees and vice versa; and staff from public sector research establishments holding posts at universities.

The Government will report on the extent of links between research establishments and universities in the next Forward Look in May 1996.

- 5. Departments should review the case for privatisation of government research establishments (including both agencies and non-departmental public bodies) by reference to our categorisation of activities into "front line", "immediate support" and "second line support".**

The Government accepts that there is a need for clear criteria for assessing whether establishments would be suitable for privatisation. The Government's criteria for prior options reviews of public sector research establishments will take account of the recommendations of the scrutiny report. These will be agreed shortly.

- 6. OST should establish and coordinate, on behalf of the Next Steps Division of OPS and consulting HM Treasury, a formal prior options process for Research Council institutes and Scottish Agricultural and Biological Research Institutes (SABRIs).**

Executive agencies and non-departmental public bodies (including the SABRIs) are already subject to prior options reviews carried out by sponsoring Departments.

To date, the Research Councils' establishments have not been routinely subject to this process, although OST has carried out a prior options review of Daresbury and Rutherford Appleton Laboratories and, as a result, established them as an independent non-departmental public body, the Council for the Central Laboratory of the Research Councils.

The Government agrees that the adapted prior options process should be extended to all Research Council establishments and will set a timetable for reviewing them (along with other public sector research establishments) with a view to the major part of the work being completed by the end of 1996.

7. HM Treasury should disseminate fresh guidance on privatisation in the light of recent Departmental reviews, drawing out the differences between the various forms of privatisation.

HM Treasury issued new guidance on privatisation at the beginning of 1995. Entitled "Privatisation of Central Government Activities: Guidance for Departments", it summarises the main issues that Government Departments and executive agencies need to consider during the process of privatising a Civil Service business or activity. Guidance on various methods of privatisation is also available from Strategic Management Division in HM Treasury.

8. In their responses to this report, Departments and Research Councils should publicly declare themselves open to approaches from private sector firms or universities wishing to discuss the potential for taking on some or all of the activities of individual public sector research establishments.

This already happens for most public sector research establishments through the prior options process. With the extension of this to Research Council establishments (see response to recommendation 6) this will be the case for all public sector research establishments.

9. Departments should treat privatisation decisions in a structured way. A strategic view, collectively endorsed by interested Departments, should be taken on whether the ultimate long-term goal for a particular establishment should be a move into the private sector or whether it should remain in the public sector for the foreseeable future. The policy framework in which the establishment operates should be designed accordingly.

The Government accepts that such a strategic view is desirable both from the viewpoint of the customer and the establishments themselves. The prior options process provides a mechanism for carrying out reviews at regular intervals of the status of research establishments and ensuring that privatisation and other options are fully considered. Such reviews are already carried out by sponsoring Departments in the case of those research establishments which are agencies or non-departmental public bodies. The prior options process in respect of research establishments will be enhanced as set out in the introduction to this response and extended to Research Council establishments.

10. In any new organisational structures, most benefit will derive from combining high potential for savings and/or flexible use of resources with relative ease of strategic direction. Ministers should give consideration to two alternative organisational models in particular, both of which would involve a number of transfers of ownership.

11. New Chief Executives would be required for the Departmentally-parented groupings; for the Research Council-parented groupings, the role would be filled by the existing Chief Executives of the Research Council concerned.

12. As an alternative to change in organisational structures, two Directors of Rationalisation posts should be created with post-holders jointly appointed by appropriate combinations of interested Departments. The Directors would be charged with identifying and recommending rationalisation of capabilities and facilities within the two broad areas of (a) marine and non-marine environment (b) food, agriculture, biotechnology and biological sciences.

The consultation on the scrutiny report revealed concern about these particular proposals in terms of the disruption that they would entail and the complex lines of accountability which would result. The Government has considered these views carefully. The Government has decided not to proceed with these proposals to group establishments, nor to appoint new Directors of Rationalisation.

Nevertheless, the Government accepts that there is scope to strengthen coordination and cooperation across Government Departments and Research Councils. This will be achieved in particular by an enhancement of the prior options process as described in the introduction to this response.

13. OST, given its oversight of the open market policy, should review with customer and owner Departments the scope for enhanced customer-side coordination consistent with continued emphasis on competition and market forces.

A number of important customer-side mechanisms already exist. Most notably, the Government publishes an annual Forward Look of Government-funded Science, Engineering and Technology which provides a strategic overview of the work of all Government Departments and Research Councils. Where the Research Councils and Departments have related interests in areas of research, they either have agreed or are in the process of agreeing concordats. A number of coordinating committees exist in particular areas, such as the Forestry Research Coordinating Committee.

The Government will consider what further mechanisms might be needed and intends to report its plans in the 1996 Forward Look.

14. Agencies, in particular, should regularly produce for their owner Departments and OST 'competition assessments' on commercial lines detailing the main elements of their business, the extent to which competition exists elsewhere for particular activities, and whether those activities are 'core' for the establishment and its competitors.

Executive agencies, non-departmental public bodies and Research Council establishments already produce corporate and business plans based on detailed business analysis. Beyond this, the amount of information needed by parent Departments and Research Councils to inform their customer role will vary from case to case and it will be for each Department and Research Council to decide whether competition assessments are appropriate.

15. Whenever plans are contemplated for major (over £2 million) investments such as new buildings, Departments should treat these as ‘windows of opportunity’ and make the detailed funding case against a background of the potential for site rationalisation with other public sector research establishments, whether or not in common ownership.

The Government accepts this recommendation, but believes that a threshold of £5 million would be more appropriate. In future Departments and Research Councils will notify others with an interest in similar areas of work of plans for major investment (those over £5 million) and all options for rationalisation will be explored jointly by relevant Departments before embarking on any such investment.

16. The Next Steps Division of OPS should formally include rationalisation in applying the prior options process to public sector research establishments.

OPS is in the process of revising its guidance on prior options reviews. The revised guidance will refer to the need to consider the scope for rationalisation or merger with other areas of government providing similar or complementary services. Supplementary guidance on reviewing public sector research establishments, which will be produced by OST, OPS and HM Treasury, will further draw this out as an option. This guidance will be issued shortly.

17. Customers should support and promote sub-contracting by establishments and the formation of consortia to respond to particular requirements or sets of requirements.

The Government's key policy is to encourage the development of a competitive open market for publicly funded science and technology. As long as they are consistent with this principle, the Government agrees with the scrutiny team that consortia are useful mechanisms to ensure efficient use of resources and avoid duplication of effort. Departments and Research Councils already support and promote sub-contracting and the formation of consortia, such as the Aberdeen Research Consortium, where these are appropriate and will continue to do so.

The Forward Look provides an annual opportunity for all Departments and Research Councils to report new cooperation initiatives affecting synergy between programmes.

18. Owner Departments should encourage their public sector research establishments to come together in clubs to consider matters of common interest, including possible rationalisations and sharing of facilities. Such clubs could be structured both functionally and geographically.

A number of such clubs already exist, such as the Edinburgh Centre for Rural Research, the Aberdeen Research Consortium and the Norwich Science Park. These go rather wider than the recommendation suggests, since they encourage establishment of links between *all* relevant parties, both public and private sector.

Within the context of its policy of encouraging a fully competitive open market for Government-funded science and technology, the Government will continue to encourage the formation of other similar clubs where there is scope for them. The Government will report on the current position in the 1996 Forward Look.

19. HM Treasury, OST and owner Departments should collectively review the scope for providing rationalisation incentives to public sector research establishment Chief Executives/ Directors and their staff.

A range of rationalisation incentives is already in place.

Where research contracts are open to competition, there is a strong incentive to improve value for money and reduce overheads, which is in itself a powerful force for rationalisation.

Increasingly, throughout the public sector, management and staff have incentives to make the best use of resources through the link between their pay and performance, either at the individual level or at the level of the team or organisation.

20. For specific groups of public sector research establishments where there is commonality of interests and/or geographical proximity, Departments should consider establishing joint management boards.

The Government accepts that there are some cases where this approach may be appropriate. It should be considered alongside scope for other links, such as the clubs and consortia mentioned in recommendations 17 and 18.

21. The Health Departments and MRC should consider bringing part of the Radiobiology Unit and the NRPB together.

The degree of overlap between the Radiobiology Unit and the NRPB appears to be small. Nevertheless, the Government accepts that this should be reviewed by MRC and the Health Departments as part of the adapted process of prior options reviews described in the introduction to this response.

22. The case for transfer of the Institute of Virology and Environmental Microbiology (IVEM) (if not merged with a university) to either MRC or BBSRC should be examined by the Director General of the Research Councils (DGRC).

In discussion with OST, MRC, BBSRC and Oxford University, NERC has taken the decision to re-align the IVEM programme to bring it into line with the Council's mission. NERC announced its intention to do so on 15 March 1995.

The re-alignment of the IVER mission is now underway; this is seen as an evolutionary process. A new project on microbial biodiversity has already been started which will enhance IVER's ability to respond to developments in environmental microbiology. All IVER projects have been reviewed to identify opportunities for tighter integration within NERC's Centre for Ecology and Hydrology (of which IVER is a component laboratory) and, to provide a clearer focus on issues relating to the NERC mission as a whole.

Areas in environmental microbiology, such as molecular microbial ecology and risk assessment of the release of genetically modified organisms, have been identified as having potential for growth and these opportunities will be seized as new programmes commence.

23. There is potential for closer alignment between the Public Health Laboratory Service (PHLS) and the National Institute for Biological Standards and Controls (NIBSC)/ NHS laboratories. This should be explored by the Department of Health in the light of the current review of the PHLS.

A number of examples already exist in which PHLS laboratories have been combined not only with NHS laboratories, but also with academic departments to create joint laboratories in which both PHLS and NHS work can be done effectively and efficiently. Further amalgamation will continue to be considered on a case by case basis. Close alignment of PHLS and NIBSC already exists through bilateral scientific committees.

24. Police Scientific Development Branch (PSDB) would benefit from agency status and its incorporation into the Forensic Science Service (FSS) should be addressed following completion of the current review dealing, *inter alia* with possible merger of the Metropolitan Police Forensic Science Laboratory (MPFSL) with either FSS or the Laboratory of the Government Chemist (LGC).

The Home Office is reviewing the future status of PSDB. The review is expected to report later this year and will be considered collectively by Ministers.

The Secretary of State for Home Affairs announced on 10 February 1995 that the MPFSL will be merged with the FSS from 1 April 1996. This will be accompanied by an extension of direct charging for forensic science services (to which provincial police services have been subject since the FSS became an agency in April 1991) to include services currently provided by the MPFSL; and by an untying of the Metropolitan Police and the City of London Police from their reliance on the MPFSL as sole provider of these services.

These changes will ensure that arrangements for providing forensic science support to the criminal justice system will be the same throughout England and Wales. Both the MPFSL and FSS have traditions of excellence. Within an enlarged agency, they will maintain and build upon already high standards of forensic science support to crime investigation in London whilst ensuring the continued development of effective and efficient forensic science provision throughout England and Wales; characterised by its high quality, clear impartiality and availability equally to police, prosecution and defence.

The worldwide reputations established by the MPFSL and FSS will be enhanced by bringing them together. International standing is especially important at a time when developments in forensic science are increasingly being brokered across national boundaries and overseas markets are opening up.

25. The scrutiny saw overlap in the fire research work of the Building Research Establishment (BRE) and the Health and Safety Laboratory (HSL). Rationalisation of this activity (as well as that undertaken by the Home Office) should be jointly considered by DOE, HSE and the Home Office in the light of the conclusions of the current DTI Deregulation Unit review of fire safety.

DOE and HSE have reviewed the fire research activities and the extent of overlap in the work of these organisations, in line with the recommendation. They consider that the work of BRE and HSE is complementary. BRE carries out investigations for DOE to inform consideration of building regulation issues. HSL carries out investigations

to fulfil HSE's statutory duties and the Home Office (through a unit based at BRE) collates and publishes fire statistics from investigations carried out by fire brigades. Coordination of research requirements is being strengthened through the new industry/ Government Whole Industry Research Strategy for the construction industry.

26. Departments should draw up customer checklists to ensure that external competition is the preferred method of sourcing R&D/ S&T work unless strategic or practical considerations clearly dictate otherwise.

It is already Government policy that research contracts should be awarded whenever possible by a competitive process. The progress of Departments and Research Councils in implementing this policy is reported annually in the Statistical Supplement to the Forward Look.

Departments already produce guidance for customer divisions emphasising this policy.

27. Research Councils should declare themselves open to applications from all competent suppliers, including government research establishments, institutes of other Research Councils, independent research associations and the commercial as well as the academic private sector.

The Government accepts that Research Council funding should be opened up to the fullest extent compatible with the maintenance of the health of the UK science and engineering base. The eligibility to compete for funds is to be extended with effect from the new grants round. The Government is seeking to strike a balance in order to enable the Research Councils to fulfil their dual role of supporting high-quality research to meet their specific aims and maintaining the long term health and vitality of the science and engineering base², particularly in universities, to which it is committed in paragraphs 3.1 and 3.2 of the 1993 Science, Engineering and Technology White Paper and paragraph 5.26 of the 1994 Forward Look. The relative importance of each of these objectives will

² The term "science and engineering base" is used to describe the research and postgraduate training capacity based in the universities and colleges of higher education and in Institutes, Units and Centres operated by the Research Councils, together with the central facilities (whether in the UK or abroad) supported by the Research Councils and available for use by UK scientists and engineers.

vary across the Councils' modes of support, and the Research Councils will be opening up their research grants when they are seeking to achieve specific research aims. The new arrangements will be monitored to check whether a satisfactory balance is being achieved. The new funding framework is set out at Annex B1. An at-a-glance guide to eligibility is set out at Annex B2.

28. OST should review with customers in two years' time the extent to which higher education institutions are quoting for work on the same full economic cost basis as public sector research establishments.

The Government agrees that higher education institutions should cost their contract work on a full economic cost basis, but recognises that there may be grounds for them partly to fund research themselves where they have an interest in the research outcome. It welcomes the initiative of the Committee of Vice Chancellors and Principals to help universities improve their costing systems. OST, the Education Departments and the Higher Education Funding Councils will review the situation over the coming two years to see whether further action is needed.

29. Departments should actively encourage staff exchanges between public sector research establishments and headquarters and draw directly on public sector research establishment expertise as appropriate in the specification of requirements.

Departments and Research Councils already encourage staff interchange wherever appropriate. For example, all senior scientific posts in MAFF are filled by open competition or trawl, involving the research institutes and agencies as appropriate; virtually all senior and middle management jobs in BBSRC's research funding groups require people with scientific backgrounds — currently a number of senior staff in BBSRC's Central Office have recent research experience in BBSRC institutes; staff exchanges between NERC establishments and NERC's Central Office are actively encouraged and NERC staff are encouraged to seek secondments in Government Departments; and MRC encourages exchanges between Units and Head Office.

When considering their requirements as customers, Departments and Research Councils will draw on a wide range of organisations for expertise and advice, including public sector research establishments.

30. OST should reformulate the open market policy explicitly to encompass, in addition to competition, the encouragement of collaboration/sub-contracting by public sector research establishments with private and public sector suppliers.

Public sector research establishments are already being encouraged to collaborate with other suppliers, to form consortia and clubs (see responses to recommendations 17 and 18) and to sub-contract work wherever this will contribute to better delivery of customers' needs.

31. MAFF should progressively withdraw from its commitment to limit variations in its level of funding to BBSRC, replacing it within 4 years by contractual arrangements.

Negotiations between MAFF and BBSRC on separate contractual arrangements between MAFF and each institute supported by BBSRC are now nearly complete. These will be fixed price contracts and there will be no commitment to funding levels beyond the terms of the contracts.

32. Departments must ensure that the owner role is clearly separated from customers and properly resourced. Owners and customers should work closely together so that a long-term view is taken of Departmental needs and the part to be played in them by public sector research establishments.

This is well established policy and was re-emphasised in the 1993 Science, Engineering and Technology White Paper "Realising Our Potential". Within overall public expenditure restraints, Departments will continue to devote resources to the development of both their customer and their owner functions.

33. All public sector research establishments should put accounting and other systems in place to enable them to allocate accurate costings to programmes and to distinguish the non-staff

element so that the cost effectiveness of particular facilities can be identified. Capital investment decisions by public sector research establishments should take account of the impact of costs to customers.

Modern costing and accounting systems are essential to demonstrate that costs are being attributed accurately and good value for money is being obtained. The July 1994 Green Paper "Better accounting for the Taxpayer's money" set out the Government's proposal to introduce resource accounting by 1 April 1998. This will assist in the production of more accurate and relevant information with which Departments can cost the resources (particularly capital) they use and match them with the outputs they deliver. In turn, this will facilitate better decision-making.

34. Departments/ Research Councils should set published targets, discussed interdepartmentally, which encourage all public sector research establishments to use the scope available to them to increase joint ventures with industry and/or universities and to maximise commercial revenue from technologies/ products generated.

Partnership between the science and engineering base and industry is at the heart of the policies in "Realising Our Potential" the Government's 1993 White Paper on Science, Engineering and Technology. Joint ventures are an important part of this because they provide a mechanism to increase the effectiveness of technology transfer. The establishment of the Edward Jenner Institute is an example. This involves joint funding by Glaxo Wellcome on the one hand and the Department of Health, MRC and BBSRC on the other to create an institute that undertakes basic vaccines research.

However, it is for Departments and Research Councils to decide whether targets are appropriate to achieving their policy objectives, on a case by case basis.

35. All public sector research establishments should at minimum have the flexibilities inherent in net running cost operation; those designated as privatisation candidates should be given the opportunity by owner Departments/ Research Councils to become either trading funds or companies limited by guarantee.

The Government accepts the argument for appropriate financial regimes that give the maximum freedom to establishments to manage their business. Most public sector research establishments already have financial regimes that give them exemption from gross running costs control. Where this is not the case, their financial regimes will be reviewed as part of the prior options process applied to them.

Where an establishment has been identified for privatisation, the Government will decide on a case by case basis whether there is benefit in an appropriate intermediary stage or whether it would be more appropriate to seek early privatisation.

36. A coordinating action manager should be identified within the Office of Science and Technology to act as a focal point for bringing together the views expressed during the public consultation period and the responses of Departments/ Research Councils.

The Head of Transdepartmental Group in OST was appointed action manager in July 1994.

37. The objective should be to have new structural arrangements in place by April 1996.

38. If the non-structural approach is adopted, Directors of Rationalisation should be appointed as soon as possible and in any event by April 1995.

See response to recommendations 10, 11 and 12.

ANNEX A

ESTABLISHMENTS COVERED BY THE SCRUTINY

AEA Technology
 ADAS
 Babraham Institute
 British Geological Survey
 Building Research Establishment
 Central Science Laboratory
 Central Veterinary Laboratory
 Daresbury and Rutherford Appleton Laboratories
 (now the Central Laboratory of the Research Councils)
 Directorate of Fisheries Research
 Dunn Nutrition Unit
 Dunstaffnage Marine Laboratory
 Fisheries Research Services
 Food Science Laboratory
 (now part of the Central Science Laboratory)
 Forensic Science Service
 Forestry Commission Research Stations
 Hannah Research Institute
 Health and Safety Laboratory
 Horticulture Research International
 Institute for Animal Health
 Institute of Arable Crops Research
 Institute of Food Research
 Institute of Freshwater Ecology
 Institute of Grassland and Environmental Research
 Institute of Hydrology
 Institute of Terrestrial Ecology
 Institute of Virology and Environmental Microbiology
 John Innes Centre
 Laboratory of the Government Chemist
 Macaulay Land Use Research Institute
 Moredun Research Institute
 National Engineering Laboratory
 National Institute of Agricultural Botany

National Institute of Biological Standards and Control
National Physical Laboratory
National Radiological Protection Board
National Weights and Measures Laboratory
Natural Resources Institute
Plymouth Marine Laboratory
Police Scientific Development Branch
Proudman Oceanographic Laboratory
Public Health Laboratory Service
Radiobiology Unit
Reproductive Biology Unit
Roslin Institute
Rowett Research Institute
Scottish Agricultural Science Agency
Scottish Crop Research Institute
Silsoe Research Institute
Torry Research Station (now part of the Central Science
Laboratory)
Toxicology Unit
Transport Research Laboratory
Virology Unit

ANNEX B1

NEW FUNDING FRAMEWORK FOR RESEARCH COUNCIL GRANTS

NEW FUNDING FRAMEWORK

The funding of all grants awarded will be on the same basis of direct and indirect costs as Research Council grants to university researchers.

'Responsive-mode grants (including ROPAs) and other awards for basic and strategic research aimed at developing and maintaining an underlying capacity in areas of strategic importance within the science and engineering base	open only to UK higher education institutions, and academic analogues as approved by each Council.
Awards for the support of strategic research to achieve specific research aims	open as above, and extended to all Research Council establishments, GREs and UK non-profit-making research organisations. For specific programmes, a Research Council can also open funding to other similar UK research organisations if by doing so, it can meet the specific aims of the research and thereby better fulfil its mission.
LINK (<i>pre-competitive collaborative research projects in specific programme areas</i>)	open to <i>all</i> LINK participants, including industry, with 50% of project funding coming from the private sector, and 50% from public sector sponsors (Research Councils and relevant Government Departments).
Contract (<i>mainly for the development of technology or software, and information gathering — eg geological and sociological surveying — to underpin research aims</i>)	open to all comers (market price).

1 For Research Council establishments and the CCLRC, the decision on eligibility rests with each Council, in conjunction with the DGRC. All Research Council establishments are eligible to apply for ROPAs.

ANNEX B2

GUIDE TO ELIGIBILITY FOR RESEARCH COUNCIL FUNDING

TYPE OF INSTITUTION	RESEARCH AWARDS		LINK	CONTRACTS
	<i>To maintain underlying capacity of the science & engineering base</i>	<i>To support strategic research with specific research aims</i>	<i>Pre-competitive collaborative research projects in specific programme areas</i>	<i>Mainly for the development of technology or software, and information gathering</i>
Universities and academic analogues	Yes	Yes	Yes	Yes
Research Council Establishments	No ¹	Yes	Yes	Yes
Government Research Establishments	No	Yes	Yes	Yes
UK Charity laboratories and other UK non-profit-making research organis- ations (eg members of AIRTO)	No	Yes	Yes	Yes
Ex-GREs	No	Yes ²	Yes	Yes
Industry	No	No	Yes	Yes

¹ Not normally eligible; decision rests with each Council in conjunction with the DGRC.
All Research Council establishments are eligible to apply for ROPAs.

² Eligibility decided on a programme by programme basis.

ANNEX C

ACRONYMS USED

ADAS	—	MAFF agency, previously the Agricultural Development Advisory Service
AIRTO	—	Association of Independent Research and Technology Organisations
BBSRC	—	Biotechnology and Biological Research Council
BRE	—	Building Research Establishment
CCLRC	—	Council for the Central Laboratory of the Research Councils
DGRC	—	Director General of the Research Councils
DOE	—	Department of the Environment
DTI	—	Department of Trade and Industry
FSS	—	Forensic Science Service
GRE	—	Government Research Establishment
HSE	—	Health and Safety Executive
HSL	—	Health and Safety Laboratory
IVEM	—	Institute of Virology and Environmental Microbiology
LGC	—	Laboratory of the Government Chemist
MAFF	—	Ministry of Agriculture, Fisheries and Food
MPFSL	—	Metropolitan Police Forensic Science Laboratory
MRC	—	Medical Research Council
NEL	—	National Engineering Laboratory
NERC	—	Natural Environment Research Council
NIBSC	—	National Institute for Biological Standards and Controls
NRPB	—	National Radiological Protection Board
OPS	—	Office of Public Service
OST	—	Office of Science and Technology
PHLS	—	Public Health Laboratory Service
PSDB	—	Police Scientific Development Branch
ROPA	—	Realising Our Potential Award
SABRI	—	Scottish Agricultural and Biological Research Institute
TRL	—	Transport Research Laboratory



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